

CREDIT OPINION

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New Issue

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Austin, TX Water & Wastewater System

New Issue: Moody's Assigns Aa2 on Austin's, TX Water & Sewer Bonds, Series 2017; Outlook Stable

Summary Rating Rationale

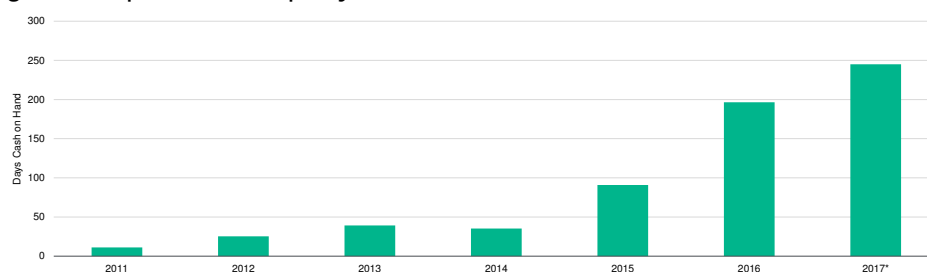
Moody's Investors Service has assigned a Aa2 rating to the City of Austin's, TX \$315.1 million Water and Wastewater System Revenue Refunding Bonds, Series 2017. At the same time, we have affirmed the Aa1 rating on prior first lien debt outstanding and the Aa2 ratings on prior subordinate lien and parity separate lien debt outstanding. The system's outlook remains stable.

The Aa2 rating on the system's separate lien (open lien) reflects strong system characteristics, improving cash and financial metrics bolstered by recent rate increases, and strong rate management and capital planning. The rating also takes into consideration a manageable debt profile and adequate legal provisions for the bonds, with the lack of an established debt service reserve.

The Aa1 rating on the prior lien reflects the relatively small amount of debt outstanding under the prior lien and strong debt service coverage that will continue given that the lien is closed. The Aa2 rating on the prior subordinate lien, which is also closed, is on par with the water and sewer separate liens (working lien) given that the net revenues available to the two liens are the same on the water and sewer system.

Exhibit 1

Significant Improvement in Liquidity Position Since Fiscal 2011



*projected
 Source: City of Austin, TX CAFRs

Credit Strengths

- » Strong service area and expanding customer base
- » History of regular rate increases has afforded solid debt service coverage levels
- » Improving days cash on hand

Credit Challenges

- » Below average liquidity for rating category
- » Historically declining water consumption

Rating Outlook

The stable outlook reflects the expectation that sound coverage will continue, supported by regular rate increases and manageable future borrowing plans. The outlook also incorporates the expectation that Austin Water will prudently maintain its infrastructure and water supply.

Factors that Could Lead to an Upgrade

- » Sustained trend of healthy operating surpluses leading to improved liquidity and debt service coverage
- » Substantial decline in system's debt profile

Factors that Could Lead to a Downgrade

- » Poor operating performance leading to a decline or prolonged weakness in reserve levels and debt service coverage
- » Significant increase in debt profile

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moody's.com for the most updated credit rating action information and rating history.

Key Indicators

Exhibit 2

Austin (City of) TX Water & Wastewater System

System Characteristics					
Asset Condition (Net Fixed Assets/ Annual Depreciation)	31 years				
System Size - O&M (in \$000s)	217,546				
Service Area Wealth: MFI % of US median	112.0%				
Legal Provisions					
Rate Covenant (x)	1.25x				
Debt Service Reserve Requirement	None for Series 2017 Bonds				
Financial Strength					
	2012	2013	2014	2015	2016
Operating Revenue (\$000)	443,020	476,869	472,675	522,033	563,046
O&M (\$000)	190,987	216,369	226,349	208,307	217,546
Net Funded Debt (\$000)	2,316,057	2,412,152	2,566,940	2,463,824	2,337,933
Annual Debt Service Coverage (x)	1.41	1.38	1.21	1.42	1.87
Cash on Hand (not including Stability Reserve)	25 days	39 days	35 days	91 days	197 days
Debt to Operating Revenues (x)	5.2x	5.1x	5.4x	4.7x	4.2x

Debt service coverage calculations vary from the coverage calculations required under the City's bond ordinances; Debt service coverage in prior reports vary due to adjustments
Source: City of Austin, TX CAFR; Moody's Investors Service

Detailed Rating Considerations

Service Area and System Characteristics: Large & Strong Service Area with Institutional Presence

The water and wastewater system predominantly serves the [City of Austin](#) (GOLT Aaa stable) as well as additional areas in [Travis](#) (Aaa stable) and [Williamson](#) (Aa1 stable) counties. Lake Travis and Buchanan are the system's two major water supply storage reservoirs and are managed by the Lower Colorado River Authority (LCRA). Combined lake storage is nearly full, which is significant when compared to about one-third full in early 2015. Heavy rains throughout Texas in the springs months of 2015 and 2016 helped restore depleted levels. The system owns and operates three water treatment plants and storage and transportation infrastructure. The total combined treatment capacity for the water system of 335 million gallons per day (MGD) far exceeds the fiscal 2016 average daily use of 103.2 MGD. The city has two main wastewater treatment plants with a total combined permitted capacity of 150 million gallons per day, which provides sufficient capacity for ongoing operations.

[Samsung Electronics Co., Ltd](#) (A1 stable), the [University of Texas System, TX](#) (Aaa stable), [NXP Semiconductors, N.V.](#) (Ba2 RUR-Up), as well as various water and municipal utility districts (MUDs) make up the system's largest water customers. The system's major customers have not changed significantly in recent years and accounted for a modest 6.3% of the system's operating revenues in 2016. The number of customers has risen modestly in each of the last five years to 225,600 for fiscal 2016, yet water consumption has been on a general decline over the past decade, which is significantly impacted by better technology that utilizes less water, and generally more conservative consumption habits. Residential retail customers make up the majority of the customer base.

The service area continues to be a strong point for the system. According to Moody's Economy.com, the Austin-Round Rock, TX area is in an expansion business cycle status. The report also states that the metro area will grow at an above-average pace over the coming year, led by high tech and professional services. Residential construction will provide support, based on demand by incoming IT professionals. Longer term, the especially well-educated labor force, the high concentration of technology businesses, the relatively low cost of doing business compared with other high-tech centers, and fast population growth will yield above average performance (Précis U.S. Metro/South/March 2017).

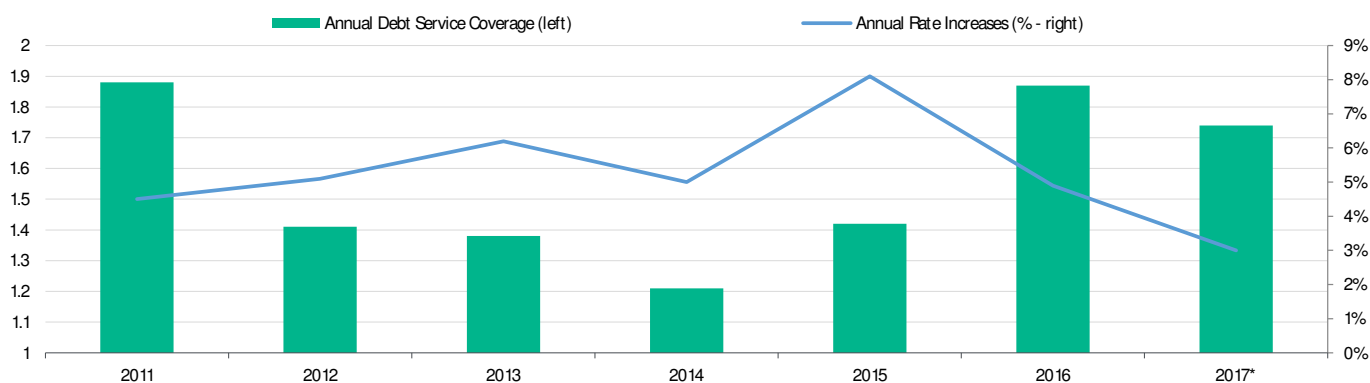
As such, we anticipate the system's customer base will remain stable and diverse for years to come. Resident wealth levels indicate slightly above average wealth levels for the city, evidenced by a per capita income and median family income of 117.6% and 112% of national levels, respectively. Unemployment for the city remains low at 3.0% in April 2017 in comparison to the state (4.5%) and national (4.1%) levels, during the same time period.

Debt Service Coverage and Liquidity: Improving Coverage & Liquidity

After declining debt service coverage and liquidity levels from fiscal 2011 to 2014, annual rate increases along with strong expenditure management helped boost annual financial metrics in fiscal 2015 and 2016. Fiscal 2016 net revenues of \$345.5 million covered total annual debt service by a solid 1.87 times, which is a solid improvement over fiscal 2014 and 2015 coverage levels of 1.21 and 1.42 times, respectively. After a 3% rate increase in 2017, management projects net revenues to climb to roughly \$372 million, which is expected to cover annual debt obligations by a solid 1.74 times. Although rate increases are now projected to occur every other year, management projects debt service coverage on all obligations to be near or above the internal target of 1.85 times over the next five years.

Exhibit 3

Rate Increases Have Led to Improved Coverage Levels



*2017 coverage based on current year projections

Source: City of Austin, TX CAFRs

LIQUIDITY

Management has taken significant steps to increase its liquidity position in recent years. Given the favorable operating performance in 2015 and 2016, liquidity has improved to a satisfactory 197 days of unrestricted cash on hand at fiscal year end 2016. This level is a significant improvement since 2011, which ended with roughly 11 days cash on hand. In addition, the system created a revenue stability reserve fund in 2013 which currently has \$28 million at fiscal year-end 2016, or a solid 85 days cash on hand. The fund is restricted for water service revenue shortfalls of 10% or greater in any given year. City Council approval is required to tap the fund and if used, only 50% of the balance is available for a single year. Importantly, the reserve provides the system with additional operating flexibility.

Although the system's policy is to maintain at least 60 days cash on hand, management targets 245 days. The projected fiscal 2017 unrestricted cash position is expected to meet this target and reserves are expected to be maintained at this level until fiscal 2022. The revenue stabilization fund is anticipated to meet its target of 120 days cash on hand at fiscal year 2018 and also be maintained at that level for the near term future.

Debt and Legal Covenants: Debt Profile Expected to Remain High

The system's debt profile is high yet manageable. Post-sale the system will have a sizeable \$2.39 billion in total debt outstanding. The majority of the system's debt (\$2.25 billion) is separate lien debt (open working lien). The system also has roughly \$18.6 million in Prior FirstLien debt and \$109.9 million in Prior Subordinate Lien debt outstanding. The system's debt level equates to an above average 4.24 times operating revenues.

The system's capital improvement plan calls for \$890.4 million in capital spending over the next five years. Spending is relatively balanced between the water and wastewater systems. Significant improvements in the plan include South Austin Regional Wastewater

Treatment Plant improvements (\$62.5M), Davis Water Treatment Plant improvements (\$52.3M), and infrastructure for advanced metering (\$43.4M). A healthy portion of the planned spending will be focused on upgrades to existing facilities versus construction of new facilities. Management plans to cash fund roughly 40% of the capital plan through annual operations with the remaining 60% being debt funded.

Despite the robust capital plan, the system's debt profile remains manageable given anticipated rate increases as well as early debt retirement initiatives. Management plans to dedicate the majority of capital recovery fees to debt defeasance, which is estimated at \$27.6 million and \$28.4 million over the next two years, respectively.

DEBT STRUCTURE

Debt amortization is below average with roughly 42% of the outstanding principal is retired in 10 years. All debt matures in fiscal 2047. The current debt service schedule is declining in nature, which will allow for additional debt capacity in future years without impacting projected debt service coverage levels.

The system, along with the city's electric utility, utilizes a commercial paper program through a \$400 million line of credit through the Bank of Tokyo. Management's practice is to draw upon this line of credit throughout the year for capital projects and then subsequently take the debt long with bond issuances, similar to the current offering. The line of credit expires on October 15, 2017, but a similar structure is expected to be renewed with a new liquidity provider in the coming months.

DEBT-RELATED DERIVATIVES

System exposure to interest rate risk remains low given the modest variable rate debt amount (roughly 5% of debt profile). The system has one outstanding variable rate issue (Series 2008). There is \$113.9 million outstanding and the bonds are supported by a letter of credit from [Citibank N.A.](#) (A1 stable) with an expiration date of October 15, 2018. The LOC is sized for the outstanding principal amount of the bonds plus 50 days of interest at 12%, the maximum rate applicable to the Bonds, and provides sufficient coverage while the bonds are in the weekly rate mode. In association with the 2008 bonds, the system entered into a swap agreement with [Goldman Sachs Bank USA](#) (A1 stable). The system pays a fixed rate of 3.6% and receives SIFMA. The mark to market for this swap was a negative \$16 million, as of June 30, 2017.

PENSIONS AND OPEB

Apportioned unfunded liabilities associated with the City of Austin Employees' Retirement and Pension Fund, a single employer defined benefit pension plan, is expected to remain manageable in comparison to the system's operating revenues. The system contributed 11.4% of the total plan's contributions in fiscal 2016, which generates a proportional Moody's Adjusted Net Pension Liability of \$309.1 million, or a manageable 0.55 times operating revenues. Moody's ANPL reflects certain adjustments we make to improve comparability of reported pension liabilities. The adjustments are not intended to replace the utility's reported liability information, but to improve comparability with other rated entities. For more information on Moody's insights on employee pensions and the related credit impact on companies, government, and other entities across the globe, please visit Moody's on Pensions at www.moody.com/pensions.

LEGAL PROVISIONS

We believe legal provisions for the bonds are adequate. The rate covenant established in the prior lien ordinance requires 1.25 times for prior lien and separate lien debt, and 1.1 times coverage for outstanding prior subordinate and all other debt. The system's Series 2013A, 2014, 2015A&B, 2016 bonds, as well as the current issuance are not supported by a debt service reserve. The debt service reserve fund for the remaining debt outstanding is satisfied with a combination of cash and sureties. The additional bonds test on the current issuance is 1.25 times the average annual debt service requirements.

Management and Governance

We believe management of the city's water and wastewater system will remain stable, demonstrated by appropriate and timely rate setting measures, prudent and conservative budgeting and forecasting of revenues, as well as maintenance of multiyear planning. Moody's notes that despite the presence of a debt service reserve, the establishment of a rate stabilization reserve is a positive influencing factor. Rate increases are subject to City Council approval.

Legal Security

The Series 2017 Bonds are secured by a lien on and pledge of the net revenues of the water and wastewater system subordinate in nature to the system's prior first lien debt.

Use of Proceeds

Proceeds from the current debt issuance will refund certain maturities of the system's outstanding Series 2009 and 2009A bonds for debt service savings, as well as take out \$125 million in commercial paper.

Obligor Profile

The City owns all the facilities of the Water and Wastewater System servicing areas in Travis and Williamson Counties. As of September 30, 2016, the Water and Wastewater System had approximately 1,170 full-time regular employees.

Methodology

The principal methodology used in this rating was US Municipal Utility Revenue Debt published in December 2014. Please see the Rating Methodologies page on www.moody.com for a copy of this methodology.

Ratings

Exhibit 4

Austin (City of) TX

Issue	Rating
Water and Wastewater System Revenue Refunding Bonds, Series 2017	Aa2
Rating Type	Underlying LT
Sale Amount	\$315,100,000
Expected Sale Date	08/01/2017
Rating Description	Revenue: Government Enterprise

Source: Moody's Investors Service

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